Communicable Disease Report

Hawai'i Department of Health
Communicable Disease Division

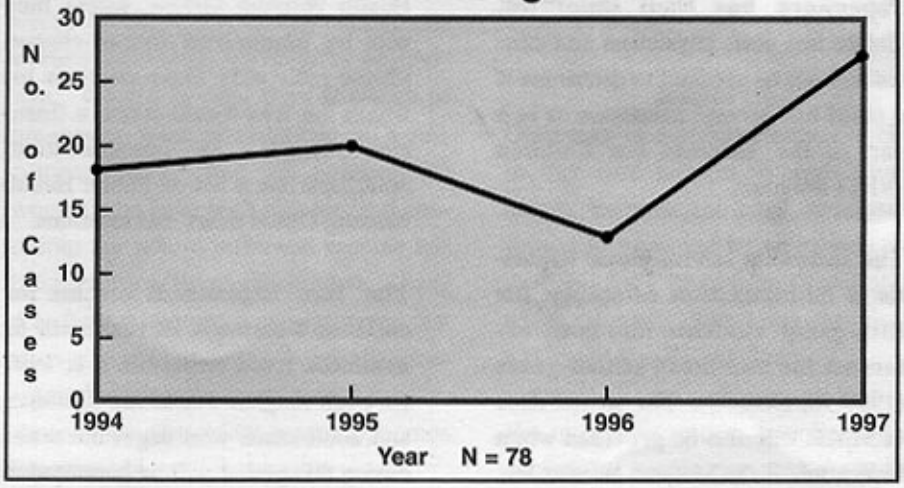
September/October 1997

Hansen's Disease In Hawai`i: A Four Year Review

Current Status

At the end of 1993, there were 460 patients on the Department of Health's (DOH) Hansen's Disease (HD) Registry. There were a total of 378 on the Outpatient Registry, with 79 on the Registry at Kalaupapa and three at Hale Mohalu Hospital. New HD patients are seen as outpatients with only previously institutionalized patients remaining on the Kalaupapa registry and at Hale Mohalu.[1] At the end of the 1997 fiscal year, 365 patients were on the HD Registry. There were 304 on the outpatient registry, with 61 on the Kalaupapa registry.

Figure 1
Hansen's Disease in Hawai'i: FY 1994-97
New Cases Diagnosed



Program Changes

The registry counts suggests that HD in Hawai`i is declining, when in fact, the incidence may be rising. Two major factors have been responsible for the registry decline.

- The mandatory isolation policy was repealed in 1969. No new patients have been registered at Kalaupapa or Hale Mohalu since then. All new patients are identified and treated on an outpatient basis. Patient's names are removed from the Kalaupapa and Hale Mohalu registries when they permanently move from either place or die.

- In 1991, physicians caring for patients with active HD on the Outpatient Registry adopted the World Health Organization protocols which treat patients for shorter time periods than was the past practice in Hawai`i. Patients are now discharged from the Outpatient Registry four years after completing therapy, as long as no other services for HD related problems are needed. They are also discharged from the registry if they die, leave the state, are not locatable, are non-compliant or found not to have HD. Patients needing services for HD related problems but without active disease may remain on the registry indefinitely.

continued on page 6

Take 3 Hepatitis B Project Expanded

The **Take 3 Hep B Project** has been expanded to include children from 12 through 18 years of age and has been extended through August 31, 1998. Governor Cayetano announced the extension at a press conference in early September. Physicians were notified of the program changes by mail in August by the Hawai`i Immunization Program.

The important points of this expanded program are noted below:

- **The eligibility criteria have been expanded to cover ALL children residing in Hawai`i between the ages 6 through 18 years, regardless of their insurance status.**

- **Paperwork has been simplified.** Unlike last year, physicians and clinics will not be required to determine if a child has private insurance or is a part of the Vaccines For Children (VFC) Program.

- **The statewide school-based hepatitis B immunization campaign for fifth-grade students has been extended for two more school years (1997-98, 1998-99). The second dose of MMR will also be provided when indicated.** Kahu Malama Nurses, Inc. has been contracted to administer the school immunization component of the project. Questions about the school-based project may be directed to them at (808) 945-7738.

- **Major health insurers in the State have committed to reimburse providers for administering hepatitis B vaccine to children during this initiative.** Details vary, so please check with specific health insurance programs you work with. In order to increase vaccination rates, it is our goal to make this vaccine available with no 'out-of-pocket' expense to parents. Children from families that cannot afford administrative or office visit fees not covered by the insurer, may be referred to their local Public Health Nursing Office, where they will be immunized free-of-charge. Please refer only those children for whom the fees would create a financial barrier to immunization. ASK2000 has a list of Public Health Nursing Office hours and locations.

- **The `free' hepatitis B vaccine for children 6 through 18 years will be available from September 1, 1997 through August 31, 1998.** Children and adolescents who begin the series during this period will be permitted to receive remaining doses of vaccine after August 31, 1998, so that the complete series can be administered according to the recommended schedule.

- **VFC and current Take 3 Hep B Project providers are pre-enrolled in this project.** If you are not a VFC provider or did not previously enroll in the Take 3 Hep B Project, and would now like to participate in this project, please call the Hawai`i Immunization Program Officer of the Day at 586-8332 to request an enrollment form.

- **Hepatitis B vaccine orders may be placed by calling 586-8312 on O`ahu or 1-800-933-4832 on the neighbor islands.** The initial order should be for a three month supply of vaccine, with additional orders placed every two months. Hepatitis B vaccine orders may be placed with your regular VFC orders for all other vaccines. Vaccines will be delivered to your office by R. Weinstein Pharmaceuticals.

Children, especially teens, tend to avoid routine physician or clinic visits and possibly need some encouragement or incentive. An incentive program, with coupons good for free or reduced-price items that appeal to kids has been created to assist you in bringing your patients in for all three doses. Participating providers will receive three coupon sheets over the course of the project year. Each sheet will have a number of free and discount offers that appeal especially to teens. These incentives will be available for you to give your patients who are 12 through 18 years of age when they receive each injection in the three-dose series of hepatitis B vaccinations. We thank you in advance for your assistance with the incentive program.

For more information about the expanded adolescent **Take 3 Hep B Project,** please call 586-8332 on O`ahu or 1-800-933-4832 on the neighbor islands.

Submitted by Judy Strait-Jones, M.Ed., M.P.H., Public Health Educator, Hawai`i Immunization Program, Epidemiology Branch.

Communicable Disease Report

Communicable Disease Division	586-4580
Epidemiology Branch	586-4586
Tuberculosis/Hansen's Disease Control Branch	832-5731
Hansen's Disease Institutions Branch	586-4580
STD/AIDS Prevention Branch	733-9010
STD Reporting	733-9289
AIDS Reporting	733-9010
Information & Disease Reporting	586-4586
After-hours Emergency Reporting	247-2191 (State Operator)
After-hours Neighbor Island Emergency Reporting	800-479-8092

The Health State

Editor:
David Sasaki, DVM, MPH

Published bimonthly by the Hawai'i Department of Health, Communicable Disease Division, 1250 Punchbowl Street, Honolulu, Hawai'i 96813
Postage paid at Honolulu, Hawai'i

Early Influenza Season

The Hawai`i influenza season is off to an early start this year. In September, the Department of Health (DOH) confirmed 12 cases of influenza type A at a windward O`ahu intermediate care facility. Antigenic identification of the isolates is pending at the Centers for Disease Control and Prevention (CDC). In addition, para-influenza virus has been isolated by the Tripler Army Medical Center.

High Risk Individuals

Persons at increased risk for influenza-related complications should be vaccinated. These include:

- persons aged 65 years and older;
- residents of nursing homes and other chronic-care facilities;
- adults and children who have chronic illness or medical conditions of the lungs or heart;
- adults and children who have chronic metabolic diseases (e.g. diabetes mellitus); and
- children and teenagers (aged 6 months-18 years) who are receiving long-term aspirin therapy.

Chemoprophylaxis with amantadine or rimantadine may be indicated for high risk individuals who are not yet vaccinated. Both are approximately 70-90% effective in preventing illness caused by influenza A.

New Recommendations

1. PREGNANT WOMEN. The Advisory Committee on Immunization Practices (ACIP) now recommends that women who will be beyond the first trimester of pregnancy (14 weeks gestation) during the influenza season be vaccinated.[1] Pregnant women who have medical conditions that increase their risk for complications from influenza should be vaccinated regardless of the stage of pregnancy.*

A recent study of the impact of influenza during 17 interpandemic influenza seasons documented that the relative risk of hospitalization for selected cardiorespiratory conditions among pregnant women with influenza increased from 1.4 during weeks 14-20 of gestation to 4.7 during weeks 37-42, compared with rates among women who were 1-6 months postpartum. Women in their third trimester of pregnancy were hospitalized at a rate comparable to that of nonpregnant women who have high-risk medical conditions for whom influenza vaccine has been traditionally recommended. Using data from this study, it was estimated that an average of one to two hospitalizations among pregnant women could be prevented for every 1,000 pregnant women immunized.[1]

2. CAREGIVERS. Influenza vaccine is also recommended for persons that may transmit influenza virus to the high risk persons they care for. This includes

- physicians, nurses and other personnel in both hospital and outpatient-care settings;
- employees of nursing homes and chronic-care facilities who have contact with patients or residents;
- providers of home care to persons at high risk (e.g., visiting nurses and volunteers); and
- household members (including children) of persons in high-risk groups.

In addition, vaccine should be administered to any person who wishes to reduce the likelihood of becoming ill with influenza.

Vaccination Clinics

Dates and times of upcoming influenza clinics may be obtained by calling ASK-2000 (275-2000).

Reporting

Outbreaks of suspected influenza illness in day care centers, schools, nursing homes, hospitals and other group settings should be **reported by telephone** to the Epidemiology Branch on O`ahu at 586-4586, Hawai`i 933-0390, Maui 984-8213, and Kaua`i 241-3563.

For more information regarding influenza activity, vaccination and chemotherapy, please call the CDC 24-Hour Voice Fax and Information System toll-free at (888) 232-3228.

REFERENCE:

[1] Centers for Disease Control and Prevention. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1997;46(No. RR-9):1-25.

Submitted by Paul V. Effler, M.D., M.P.H., Chief, Epidemiology Branch, and Acting Chief, Communicable Disease Division.

---

* *Because influenza vaccine is not a live virus vaccine and major systemic reactions to it are rare, many experts consider influenza vaccination safe during any stage of pregnancy. However, because spontaneous abortion is common in the first trimester and unnecessary exposures have traditionally been avoided during this time, some experts prefer influenza vaccination during the second trimester to avoid coincidental association of the vaccine with early pregnancy loss.*

TB Skin Testing for HIV-Infected Persons: New Recommendations

The Centers for Disease Control and Prevention (CDC) has recently revised their recommendations regarding anergy skin-testing and preventive therapy for Human Immunodeficiency Virus (HIV)-infected persons.[1] According to these new recommendations, anergy testing is no longer recommended as a routine component of tuberculosis (TB) screening among HIV-infected persons in the United States (U.S.).

This change from previous recommendations followed a February 1997 meeting at the CDC, during which current information regarding anergy skin-testing, Purified Protein Derivative (PPD) skin-testing, and TB preventive therapy for HIV-infected persons was discussed. In formulating these new recommendations, the CDC considered the results of this meeting, as well as a review of published studies.

The Test

Anergy skin-testing assesses the cell-mediated, delayed-type hypersensitivity (DTH) responses to skin test antigens. The antigens are administered by intradermal injection using the Mantoux method, and have conventionally been considered positive if an induration measuring 5 mm or more occurs within 48-72 hours. Mumps and Candida are usually used as the "control" antigens, since practically all individuals have been exposed to these agents, and should mount an appropriate immune response. PPD is also included in the skin test panel. Impaired DTH response is directly related to a decreasing CD4+T-lymphocyte count, and is also a predictive factor for the progression of acquired immunodeficiency syndrome and mortality in HIV-infected persons.[2,3,4,5] Because of complications associated with active tuberculosis (TB) in HIV-infected persons, it is important that these persons be screened for latent TB infections, and receive preventive therapy with isoniazid (INH) if indicated.

Limited Usefulness of Test

Several factors limit the usefulness of routine anergy testing in HIV-infected patients. These factors include problems with

- standardization and reproducability of anergy skin-testing methods,
- the variable risk for TB associated with a diagnosis of anergy, and
- the lack of documented benefit of anergy skin-testing as part of screening programs for M.tuberculosis infection among HIV-infected persons.

It is not possible to exactly assess the risk of TB in HIV-positive anergic individuals, but the risk appears to be low. In studies conducted in the U.S. in which preventive therapy was administered principally to PPD-positive persons,[6,7] no cases of TB were observed in anergic persons. In a multicentered study,[8] the effect of residence on risk for TB was much greater than that of anergy. "In the U.S., the public health impact of finding and treating patients who have infectious TB to prevent further transmission, and of providing preventive therapy to PPD-positive, HIV-infected persons to prevent additional infectious TB cases, should be greater than the effect of preventive therapy for HIV-positive anergic persons."[1]

Preventive Therapy

Whether anergic or not, HIV-positive PPD-negative individuals should be considered as candidates for preventive therapy if they have been recent contacts of patients with infectious pulmonary TB. Also preventive therapy may be beneficial for

- children who are born to HIV-infected women,
- children who are close contacts of a person with infectious TB, and
- HIV-infected adults who reside or work in institutions and are continually and unavoidably exposed to patients who have infectious TB.

"In selected situations, anergy testing may assist in guiding individual decisions regarding individual therapy. However, results of currently available anergy-testing methods in U.S. populations have not been demonstrated to make a useful contribution to most decisions about INH preventive therapy."[1]

REFERENCES:

[1] Centers for Disease Control and Prevention. Anergy skin testing and preventive therapy for HIV-infected persons: revised recommendations. *MMWR* 1997;46(No. RR- 15):1-10.

[2] Birx DL, Brundage J, Larson K, et al. The prognostic utility of delayed-type hypersensitivity skin testing in the evaluation of HIV-infected patients. *J Acquir Immune Defic Syndr* 1993;6:1248-57.

[3] Gordin FM, Hartigan PM, Klimas NG, et al. Delayed-type hypersensitivity skin tests are an independent predictor of human immunodeficiency virus disease progression. *J Infect Dis* 1994;169:893-7.

[4] Blatt SP, Hendrix CW, Butzin CA, et al. Delayed-type hypersensitivity skin testing predicts progression to AIDS in HIV-infected patients. *Ann Intern Med* 1993;119:177-84.

[5] Dolan MJ, Clerici M, Blatt SP, et al. In vitro T cell function, delayed-type hypersensitivity skin testing, and CD4+ T cell subset phenotyping independently predict survival time in patients infected with human immunodeficiency virus. *J Infect Dis* 1995;172:79-87.

[6] Daley CL, Hahn JA, Hopewill PC, Moss AR, Schechter GF. Incidence of tuberculosis in injection drug users in San Francisco, 1990-1994 [abstract no. 11]. *Lancet Conference on the Challenge of Tuberculosis,* Washington D.C., September 1995.

[7] Graham NMH, Galai N, Nelson KE, et al. Effect of isoniazid chemoprophylaxis on HIV-related mycobacterial disease. *Arch Intern Med* 1996;156:889-94.

[8] Markowitz N, Hansen NI, Hopewell PC, et al. Incidence of tuberculosis in the United States among HIV-infected persons. *Ann Intern Med* 1997;126:123-32.

Submitted by James Gollop, M.D., M.P.H, Acting Chief, Tuberculosis Branch.

Communicable Disease Fact Sheets

In 1996, the Epidemiology Branch of the Department of Health (DOH) produced fact sheets on many communicable diseases commonly asked about in our community and of concern to travelers. These were produced primarily for school health aides to assist them in recognizing communicable disease problems in our schools. The fact sheets include diseases reportable to the DOH and others that are not reportable.

Fact sheets are available for the following diseases (in alphabetical order): *Amebiasis, Angiogstrongyliasis, Anisakiasis, Anthrax, Arboviral Infections, Babesiosis, Botulism, Brucellosis, Campylobacteriosis, Cat-Scratch Disease, Chickenpox, Cholera, Ciguatera Fish Poisoning, Conjunctivitis, Cryptosporidiosis, Dengue Fever, Diphtheria, Fifth Disease, Giardiasis, Haemophilus Influenzae Type b, Hand, Foot and Mouth Disease, Hansen's Disease, Hepatitis A, Hepatitis B, Hepatitis C, Histoplasmosis, HIV, Impetigo, Kawasaki Syndrome, Legionellosis, Leptospirosis, Listeriosis, Lyme Disease, Malaria, Measles, Meningococcal Meningitis, Viral Meningitis, Infectious Mononucleosis, Mumps, Pediculosis (Head, Body & Crab lice), Pertussis, Pinworm Disease, Plague, Poliomyelitis, Psittacosis, Rabies, Ringworm, Rocky Mountain Spotted Fever, Roseola, Rubella, Salmonellosis, Scabies, Scombroid Fish Poisoning, Shigellosis, Shingles, Sporotrichosis, Stinging Seaweed Disease, Strep Throat/Scarlet Fever, Swimmer's Itch, Tetanus, Trichinosis, Tuberculosis, Tularemia, Typhoid Fever, Vibriosis, Yellow Fever and Yersiniosis.* Newly reportable diseases will be added to the list from time to time.

Each sheet answers the following about the disease in question:

- What is ( )?
- How do you get it?
- What are the symptoms?
- When do symptoms start?
- What is the treatment for ( )?
- Should an infected person be excluded from school or work?
- How can you keep from getting it?

The disease fact sheets are accessible on the internet through the DOH home page. The address for the fact sheets is **www.hawaii.gov/health/chicdd01.htm.**

Aids Reporting: A Reminder

Recent news releases have indicated that newly diagnosed cases of AIDS and the death rate from the disease is decreasing. However, to prevent complacency and to increase the opportunity for infected individuals to get early treatment, prompt reporting of Human Immunodeficiency Virus (HIV) infections is very important.

Diagnosed AIDS cases are reportable to the State of Hawai`i Department of Health (DOH) under Hawai`i Revised Statutes §§ 325-2. The diagnosis may be made using the following case definition: HIV plus an opportunistic infection, or HIV plus a CD4 lymphocyte laboratory result of <200 or <14% of the total CD4 lymphocyte count.

This request to report is made to Hawai'i's physicians, hospitals and other health care providers who diagnose AIDS cases. To inquire about how to report patients with AIDS to the DOH, please call the DOH STD/AIDS Prevention Branch's AIDS Surveillance Program at 733-9010.

Accurate AIDS reporting will help facilitate the most appropriate use of resources for HIV/AIDS services.

Welcome Dr. Burr!

Dr. Roger Burr, M.D., M.P.H. and board certified in Family Practice, recently arrived as an Epidemic Intelligence Service (EIS) Officer with the Centers For Disease Control and Prevention (CDC). He is on assignment with our Communicable Disease Division for two years. Prior to joining the CDC, Dr. Burr practiced for six years in a Community Health Center in San Antonio, Texas, and was a faculty member of the University of Texas Health Science Center in San Antonio. He has had a long interest in Public Health, especially International Health and Preventive Medicine. He has a wife and four year-old son. His office is in the Epidemiology Branch. He may be reached at 586-4584.

Hansen's Disease

continued from page 1

During the last four years, 213 patients were discharged from the registry using these new criteria, while 78 newly diagnosed cases were added.

New Case Review

Between 1994-1997, 78 new cases were diagnosed in the State. The number of new cases ranged between 13 and 27 cases/year. In 1996, the number of new cases declined to 13 from the four-year mean of 19. However, in 1997, 27 new cases were identified (See Figure 1).

Over the four years, only 5% of the new cases were native-born residents of the state. The majority of new patients originated from the Philippines (54%), while residents from the "Other Pacific Islands" group (the former Trust Territories of the U.S. - Republic of Palau, Federated States of Micronesia, Republic of the Marshall Islands) accounted for 28% of the cases (See Figure 2). In 1997, 13 cases were from this group, which had previously accounted for only 1-3 cases/year.

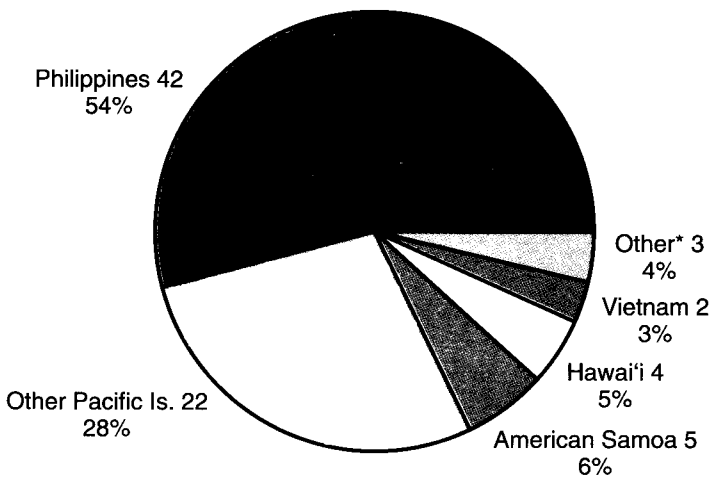
Ages of new cases during the four year period ranged from nine to 81, with a median of 36 years. Forty percent of the cases occurred between the ages of 21-40. However in 1997, there was an increase in younger patients, with 30% of the cases occurring in patients <20 years of age. In the previous three years, this age group accounted for only 12% of cases. By sex, 42 (54%) were male and 36 (46%) were female.

By island of residence, 53 lived on O`ahu, 15 on the island of Hawai`i, four in Maui county and two on Kaua`i.

In 1997, screening of 34 household members of the index case from the "Other Pacific Island" group resulted in identifying four new active Hansen's Disease cases. As an extension of the household contact investigation, three clinics were held to screen all persons coming from the same community of origin. These clinics screened 237 individuals. As a result of the screening program, seven more individuals were identified to have active HD. Two of these individuals arrived in Hawai`i only a few days prior to screening. The DOH is investigating the possibility of more active cases in this group of people.

Figure 2

Hansen's Disease in Hawai'i: FY 1993-97
By Place of Birth



N = 78
* - India, Mexico, Thailand

"An awareness of immigration patterns, the status of diagnosis and care of HD in the Asia-Pacific region, and the screening of immigrants, will be important in addressing future needs of people with HD in Hawai'i."

Summary

Although the incidence of HD diagnosed in Hawai`i is low, it is not decreasing because of a continued influx of imported cases. In addition, there has been a recent change in the country of origin of newly diagnosed cases. An awareness of immigration patterns, the status of diagnosis and care of HD in the Asia-Pacific region, and the screening of immigrants, will be important in addressing future needs of people with HD in Hawai`i.

For more information, please call the Hansen's Disease Community Program at 735-2472.

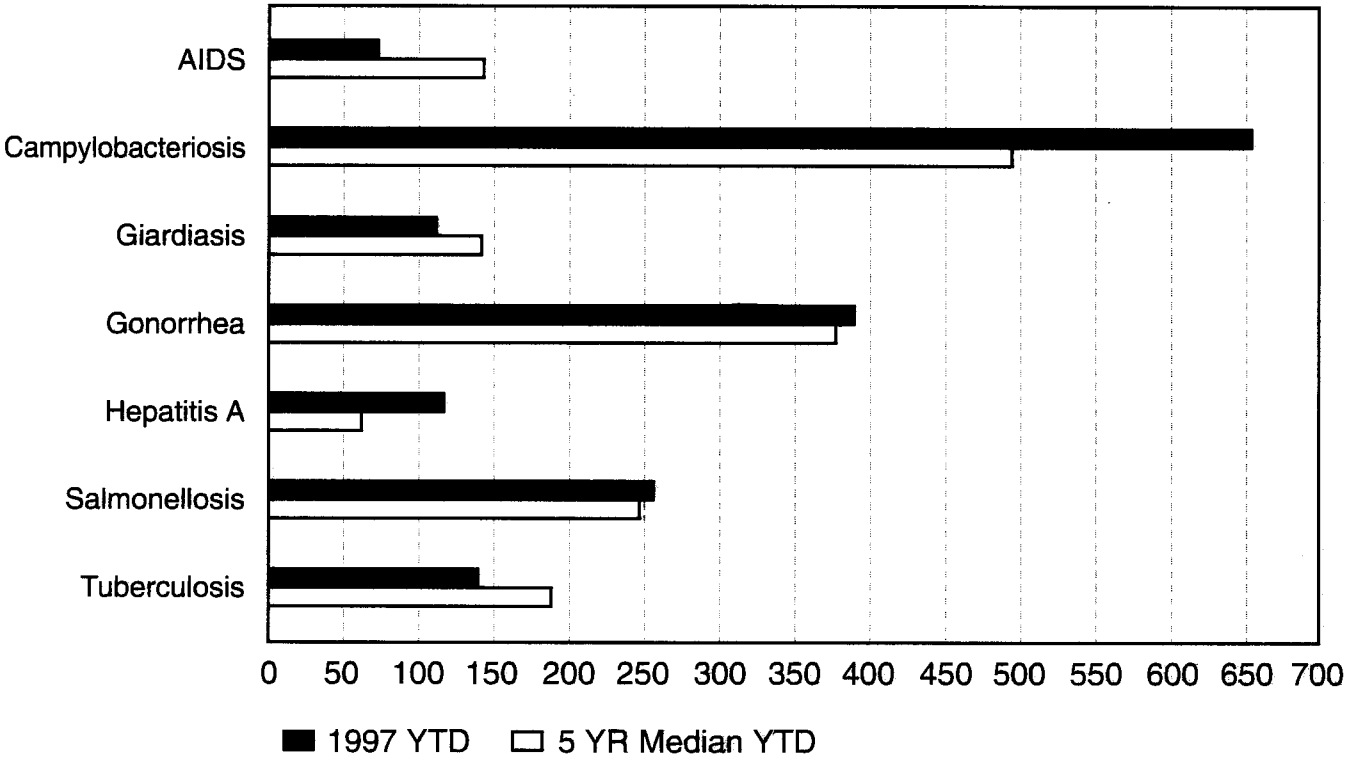
REFERENCE:

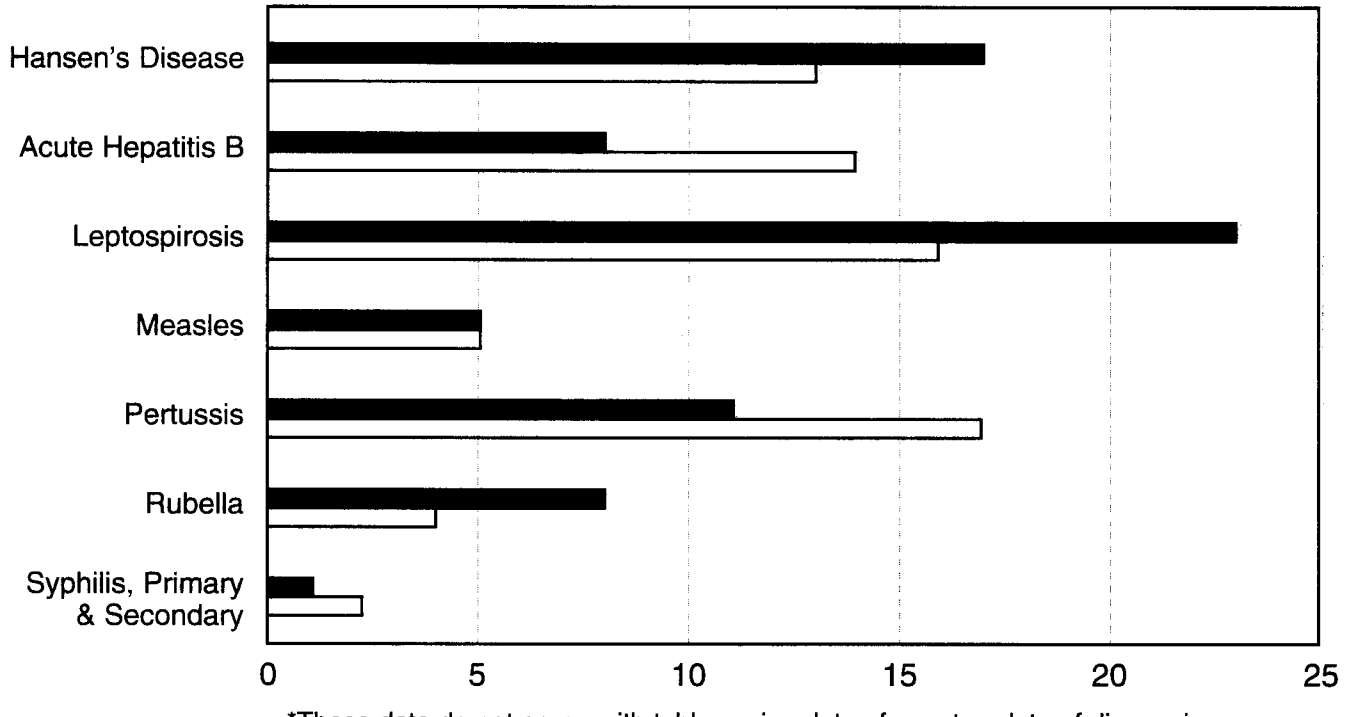
[1] Maruyama, Mike, Hansen's Disease in Hawai`i, *Communicable Disease Report, 1994, Hawai`i Department of Health,* January-February, 1,3.

Submitted by Lenette Tam, BSN, Section Head, Hansen's Disease Community Program, Hansen's Disease Branch.

Communicable Disease Surveillance

Selected Diseases by Date of Report*
Hawai'i, 1997 Year-to-date Through September





*These data do not agree with tables using date of onset or date of diagnosis.